

APPENDIX N

ANALYSIS OF THE NO GRAZING ALTERNATIVE

MANAGEMENT ACTIONS

Eliminating livestock grazing from the public lands would call for a series of management actions. These actions include surveying and fencing the boundaries of public lands, placing cattleguards on all access roads into public lands, removing all livestock related improvements that do not benefit other resources, and canceling grazing leases and permits.

IMPACT ANALYSIS OF MANAGEMENT ACTIONS

The following is an analysis of the impacts these management actions would have on the resources on public lands and to the users of these resources.

Air Quality

No short-term impacts to air quality are anticipated. However, the reduction in animals grazing the public land may have long-term impacts. An increase in vegetative cover would provide additional fuel in wildfire outbreaks causing the fires to burn hotter and faster. Such fires are difficult to control and may therefore burn more acreage. The resulting smoke and combustion gases would deteriorate air quality. These impacts would be moderately significant for localized areas.

Soils and Water

The elimination of livestock grazing would have beneficial impacts on streamside riparian habitat. Livestock prefer riparian habitat and damage streambanks through hoof action as well as eating the vegetation. Soil compaction, erosion, and a deterioration in water quality results. These conditions would tend to improve as areas revegetated and freeze/thaw action loosens the compacted soil. These impacts would be moderately significant for localized areas covering about 8,962 acres.

Energy and Minerals

Conflicts between livestock and energy and mineral operations would be eliminated. However, cattleguards would be needed on all access roads. This impact would be moderately significant for small operations.

The fencing of the boundaries of the public lands would make identifying public surface easier for energy and mineral exploration. However, public minerals also extend to private lands. Cross-country methods of exploration would be made more difficult by the added fences. These impacts would not be significant.

Lands and Administration

Fencing the boundaries of public lands would decrease the likelihood of trespass activities. All right-of-way grants would carry stipulations for fencing and installation of cattleguards on access roads. This impact would be moderately significant to some applicants.

The Garnet Resource Area is made up of scattered tracts. If the resource area was one consolidated tract it would take only 60 miles of boundary fence. However it exists in 349 tracts requiring 911 miles of boundary fence. Surveying and fencing of the boundaries would be a substantial administrative cost, as would be the installation of cattleguards on access roads. Maintenance of these items would be a continuing necessity. This impact would be highly significant.

Recreation

Recreation access would be affected by a number of factors if livestock use is eliminated. The principle factor is that of fencing. New fences along property boundaries and easements or rights-of-way would inhibit recreational travel both with vehicles and on foot or horseback. On the other hand, fencing would identify the boundaries of public land and thus would help users to stay on public land for their recreational pursuits, eliminating some of the present conflicts between private landowners and recreationists, particularly along waterways. These impacts would be moderately significant.

Many vehicle ways are presently maintained by livestock users for access to their allotments. Such maintenance enhances recreational opportunities by preserving traditional routes. As a result of the elimination of grazing opportunities, ranchers and other landowners would stop such maintenance and access ways would deteriorate. In addition, landowners may become less inclined to allow recreational access via their private land. Presently several cooperative agreements exist with grazing lessees that open their private land to public use along with adjacent public lands. This opens additional lands for hunting. Eliminating grazing on public lands would likely place in jeopardy the cooperative agreements for walk-in hunting areas in the Blackfoot Special Management Area and the areas listed in Table 3-9. This impact is highly significant for localized areas.

Assuming that public access remains available, the elimination of livestock from areas that are popular for recreation generally would enhance the recreational experience. Roadless and undeveloped areas would appear more wild without the presence of livestock. The reduction of manure and flies would also enhance the enjoyment of recreation areas. Riparian zones would be less trampled and often more desirable for camping, fishing, and other similar activities. These impacts would be moderately significant.

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Vegetative changes would take place that could affect recreation. Changes in wildlife populations would in turn affect big and small game observation and hunting. Depending on the specific site conditions, more shrubs or grass would influence the amount of desirable space for picnicking, camping, or other recreational activities. Wildfires may become more frequent and severe, thus creating public hazards and impacting the physical environment that recreational activities depend on over the long term. These impacts would be moderately significant for localized areas.

Visual Resources

The vigorous vegetative growth that would result from a decrease in grazing animals would enhance the visual quality of the landscape in the resource area. Visual quality would also be enhanced by the removal of range improvements such as internal fence lines. However, this would be offset by the construction of boundary fences. These impacts would be moderately significant.

Cultural

The fencing of boundaries may bring about the discovery of new cultural sites. The fences will better designate public land and discourage the removal or destruction of cultural assets. These impacts would be moderately significant for localized areas.

Wilderness

The elimination of livestock grazing in wilderness areas would have similar impacts as listed for recreation. In addition, the removal of range improvements would enhance naturalness. Under wilderness laws, livestock operators may be authorized to use motorized vehicles inside the wilderness area. This alternative would remove the possibility of this impact. These impacts would be moderately significant for localized areas.

Forestry

It is well established that seedlings are damaged by trampling. Livestock also are a significant contributor to the problem called zootic climax. This is where years of heavy livestock use has altered the understory vegetation resulting in the formation of a dense sod. Sodded areas are impossible to reforest unless the sod is mechanically scarified or treated with an herbicide.

Fifty-nine percent or 66,406 acres of suitable CFL have reforestation problems. Much of this acreage is now grazed or would be suitable if the canopy is opened. With the current level of harvest, there will be some 10,500 acres continually in the status between cutover and stocked, which lasts for approximately 15 years. These are the acres of transitory range. The first five years are critical for livestock damage.

Therefore, 3,500 acres are always susceptible to livestock damage. Under current management those acres that are reforested artificially and are susceptible to cattle damage are planted to 8x8 foot spacing. This is 20-25 percent over normal stocking. Cattle damage however is not the only reason for tighter spacing. Therefore, this is not always a cost that could be removed by elimination of grazing.

The elimination of livestock grazing from all CFL would not be sufficient basis by itself to adjust the annual sustainable harvest. Removal of livestock would undoubtedly facilitate forest management, but it is not critical to the success or failure of the program. Therefore, the short and long term impacts on forest management are not significant.

Range

Approximately 826 miles of new fence and 85 miles of existing boundary fence would be needed to assure that livestock would not be able to enter and graze public lands. New construction costs would be approximately \$4,128,750. Maintenance costs would run about \$3,188,500 over the life of the plan.

About 254 new cattleguards would be needed in the boundary fence. The construction costs would run \$635,000 (based on 1983 construction costs). Long-term maintenance costs would run about \$127,000 per year over a 20-year period. The total additional expenditure to implement this alternative is \$8,079,250 over a 20-year period. This is a highly significant impact.

Approximately 85 miles of interior livestock fences would no longer be needed and would cost about \$42,500 to remove (based on \$500/mile removal costs). Existing grazing leases would allow ranchers who contribute to the fences to have salvage rights.

Over the long term, the elimination of livestock grazing would allow improvement in vegetative condition in areas rated as good, fair, or poor. This is most applicable to riparian areas. This impact would be moderately significant for localized areas.

The cancellation of grazing leases and permits would take two to ten years. All lessees and permittees are guaranteed a two-year notification of cancellation. If permits and leases were simply allowed to expire before cancellation, ten years would pass before all leases were canceled. There are currently 5,930 AUMs bringing in about \$8,000 per year. These receipts would decline, but the loss would be insignificant.

Upon cancellation any range improvements that are beneficial to other resources would be maintained by the BLM. At present the lessee/permittee would be eligible for compensation for their lost investment in these range improvements. These impacts would be moderately significant for localized areas.

Vegetation

The short-term effects of eliminating livestock grazing on public lands would include improving the vigor of those plant species that are preferred as forage by livestock in many grazing allotments. The amount of vegetation remaining onsite as residual cover and litter would increase markedly.

No dramatic resource area-wide changes would be expected in the composition of vegetative communities in the short term because the establishment of new long lived perennial plants, which characterize the vegetation in this region, occurs over a longer period. Even the sites with the greatest potential to respond vegetatively to management changes would require an estimated five years to improve from a fair to good condition under the most favorable management practices. (Refer to Appendix L for a discussion of how sites were classified and how vegetative condition ratings were assigned to plant communities found on these sites.)

The expected increase in residual vegetation would also increase the potential for wildfires. Wildfires would be expected to spread rapidly and burn more intensely.

The long-term effects of elimination of livestock grazing can be estimated thru inspection of areas where grazing has been excluded for a relatively long period of years. Such areas were located and inspected during the course of the vegetative inventory. In general, these areas are strongly dominated by long lived perennial grasses that provide the forage preferred by cattle, elk, and other large ungulates that subsist mainly on grass and grass-like plants. The exceptions to this are sites where woody vegetation dominates the site if undisturbed. The plants in these communities are often very coarse and some exhibit decadence as a result of excessive standing litter within the crown of the plant.

Wildlife and Fisheries

About 7,359 acres of unsatisfactory big game winter range would improve to satisfactory over the long term if livestock grazing were eliminated. About 4,204 acres of unsatisfactory riparian habitat would improve to satisfactory over the long term if livestock grazing were eliminated. Competition between wildlife and livestock for summer range forage would be eliminated. About 6.4 miles of suboptimum aquatic habitat would improve as bank cover and stability increased. Social intolerance between some big game species and livestock would no longer be a factor. Habitat changes brought on by wildlife populations could be more easily identified and monitored. These benefits to habitat and wildlife would be moderately significant.

The fencing of public land boundaries in mountainous terrain and intermingled ownership patterns would create barriers for big game movement. The incident of mortality due to fence entanglement would increase with the increased miles of fence. This

would be somewhat mitigated because all internal fences would be removed except when they are needed to further resource programs.

In some cases livestock under proper management can be a tool for effective forage manipulation to maintain or even improve wildlife habitat. These management options would be forgone under this alternative.

These impacts to wildlife population and habitats would be moderately significant to localized areas.

Economic

If all BLM grazing was eliminated in the Garnet Resource Area, changes in income by typical ranch sizes would range from a reduction of 2.76 percent to 12.67 percent. See Table N-1 for the detailed information by ranch size. Explanation of how this analysis was done is contained in Appendix R.

TABLE N-1
EFFECT OF NO GRAZING
ON RANCH INCOME

Ranch Size Category	Baseline Optimum Profit	No Grazing Optimum Profit	% Difference in Optimum Profit
Class I	6,730.13	5,877.17	-12.67
Class II	20,611.96	19,615.19	- 4.80
Class III	37,396.21	36,038.55	- 3.60
Class IV	132,560.09	128,896.62	- 2.76

These impacts would be insignificant for permittees/lessees who have 25 AUMs or less. However, the significance of losing the use of public lands could be high for those who depend on public lands for a great part of their total AUMs.

The permitted or leased AUMs may be used by livestock operators to help secure operation loans. Also the AUMs contribute to the value of the private lands at the time of sale. Loss of AUMs on public lands can have a profound impact on property value if the operation is no longer a viable economic unit without them.

A major component of an operator's income comes from ranching in the Garnet RA. This is true for all but the smallest ranches that may produce more income from crops or from outside sources. Therefore, a reduction in BLM grazing would have a direct effect upon personal income. Even with large cuts in income, most ranchers would continue ranching in the short term. One of the major determining factors in how long an operation can sustain itself through depreciation, deferred maintenance, or use of equity capital is the operator's current debt load. If the rancher's land is paid for, it is likely that they can continue in business.

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The counties of Granite, Missoula, and Powell would see a reduction in grazing receipts of about \$2,168, \$334, and \$1,604 respectively each year. This would not be a significant reduction in income for the counties.

Social

The social wellbeing of about 80 ranch families would decrease under this alternative. The magnitude of impacts would be related to the dependency of the ranch upon BLM grazing and the economic health of each individual operation. Some would be severely impacted while others would see little effect.

Those operators with both a high dependency upon BLM grazing and a high debt load could be forced out of business or forced to find outside employment. However, prospects for outside employment in rural areas may not be good.

If a rancher were forced to quit the livestock business many intangible losses could also occur. Among these are the loss of opportunity to live a preferred lifestyle, loss of ancestral ties to the land, and the possible breakup of extended families and close circles of friends.

No specific information on attitudes toward the No Grazing Alternative has been collected. However, the reaction of ranchers and those who identify with them can be expected to be extremely negative. Even though many ranchers would experience little or no impact personally, they would likely sympathize with those who would experience adverse impacts. Given the current economic climate for the livestock industry, this alternative would likely be viewed as one more step in forcing small family ranchers out of business. It could be expected that widespread resentment toward BLM policies would grow and persist for the foreseeable future. This alternative would likely strengthen resolve that planning and management of the public lands be done at the local level.